

Server Components Supporting Application Delivery & Execution License

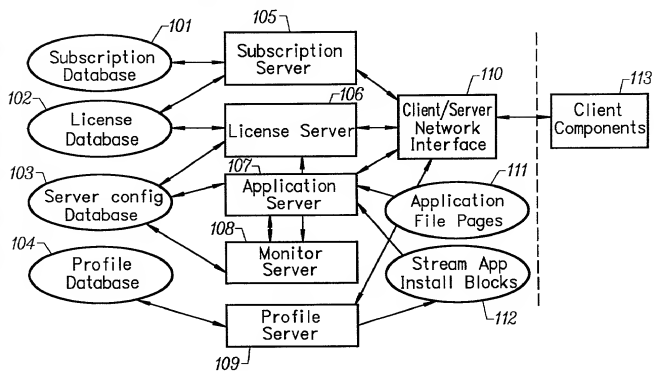


FIG. 1

Client Components Supporting Application Delivery & Execution

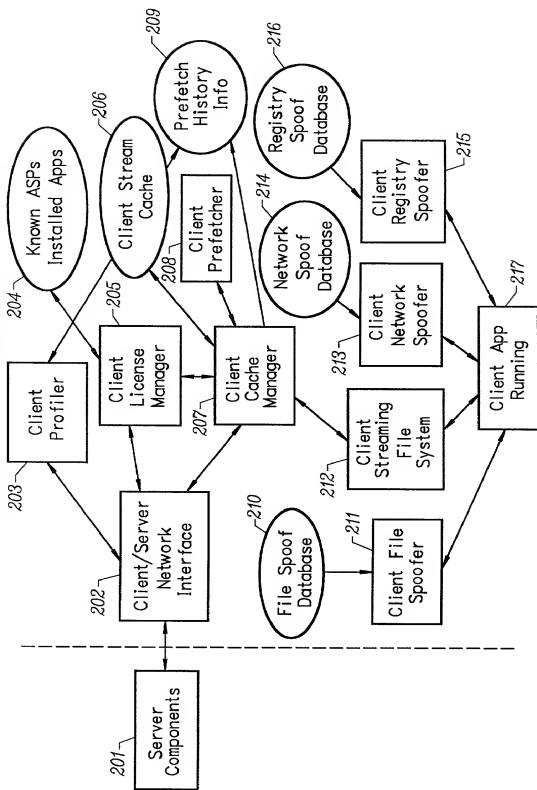


FIG. 2

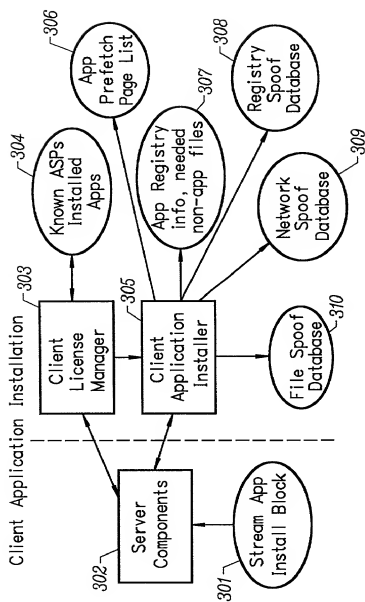


FIG. 3

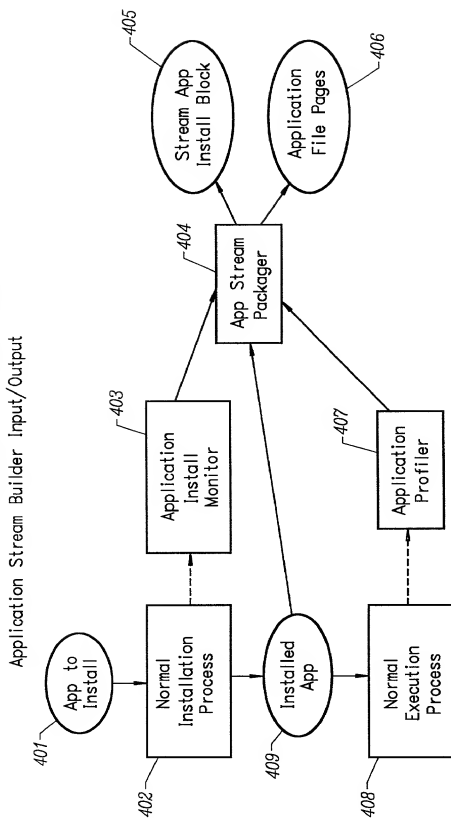
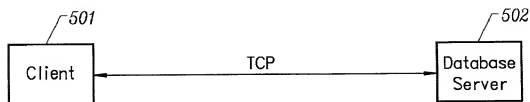
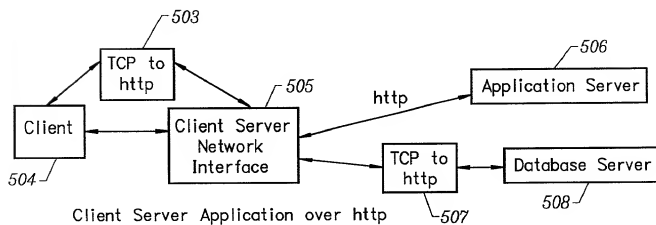


FIG. 4



Client-Server Application
over TCP

FIG. 5A



Client Server Application over http

FIG. 5B

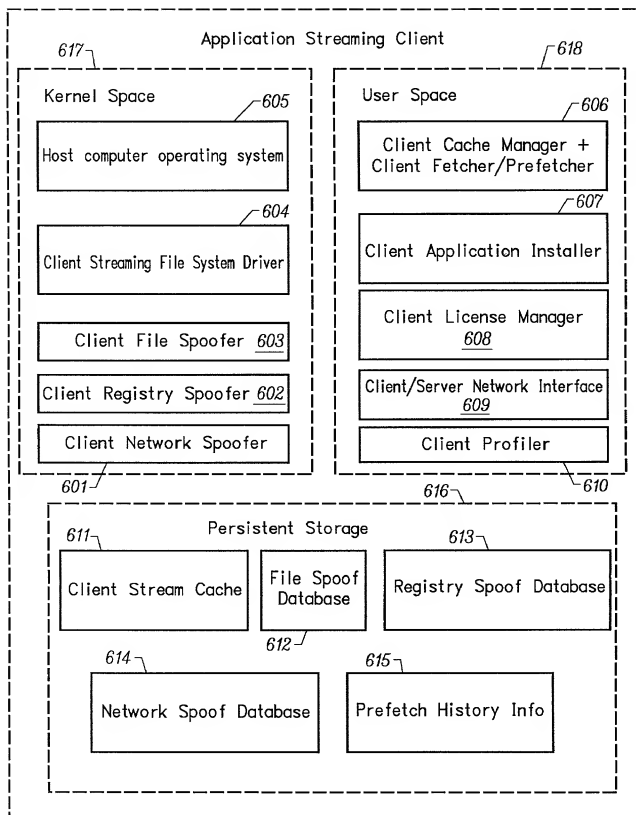


FIG. 6A

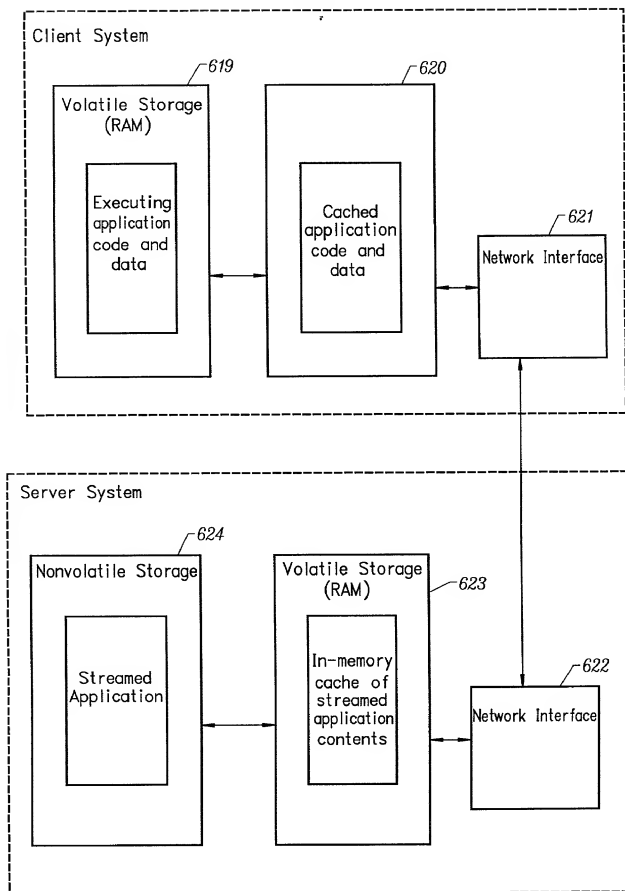


FIG. 6B

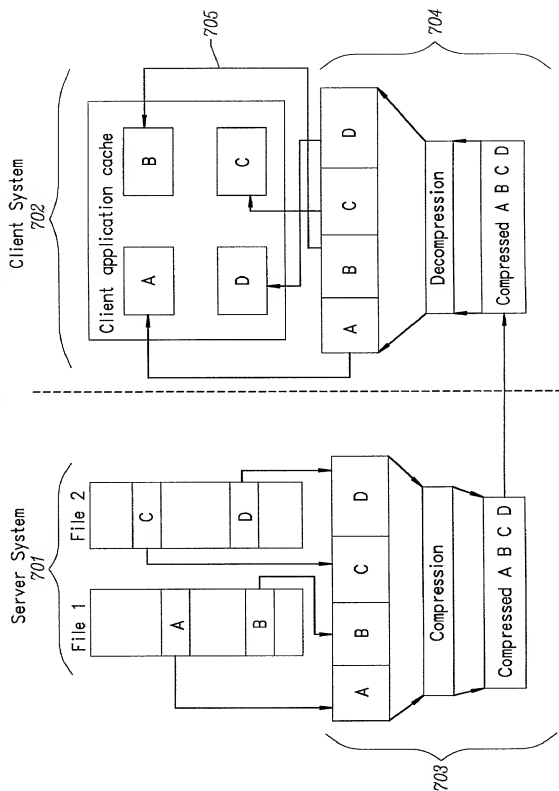
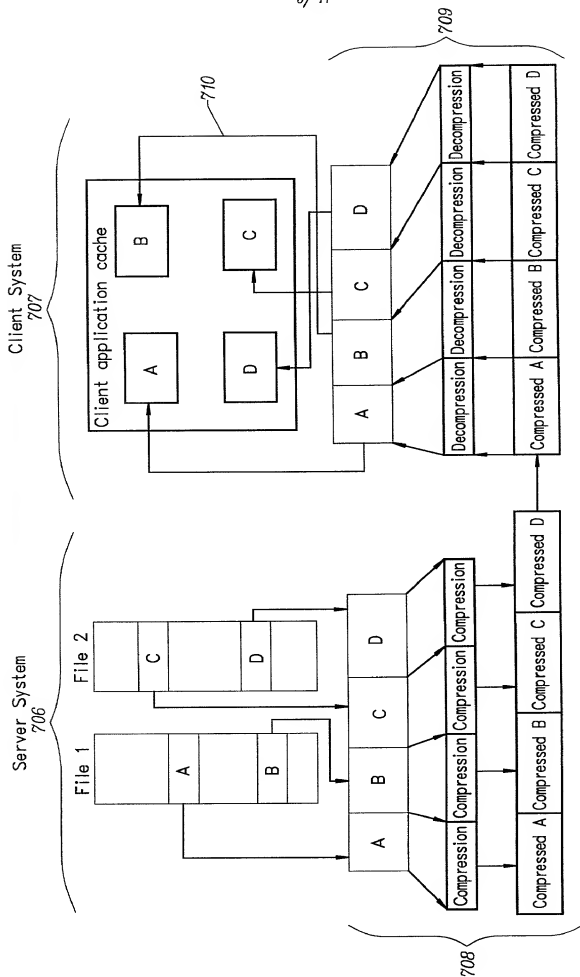


FIG. 7A



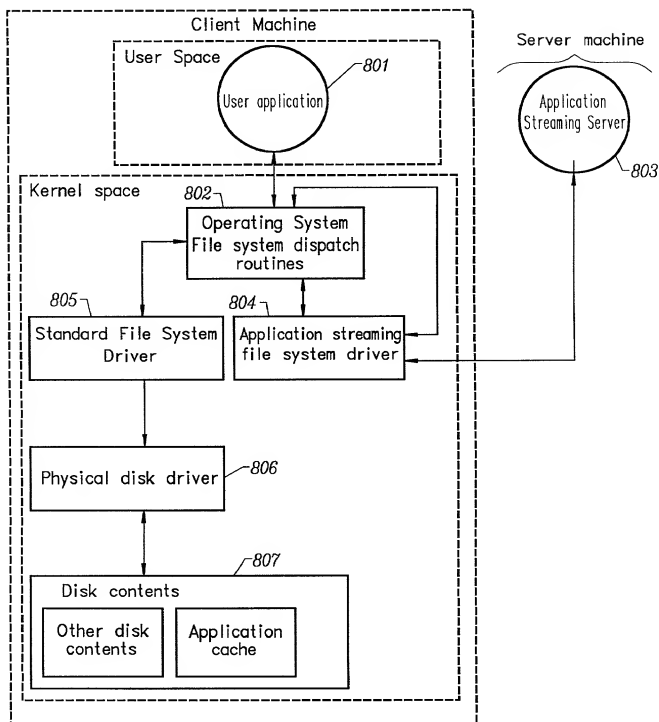


FIG. 8

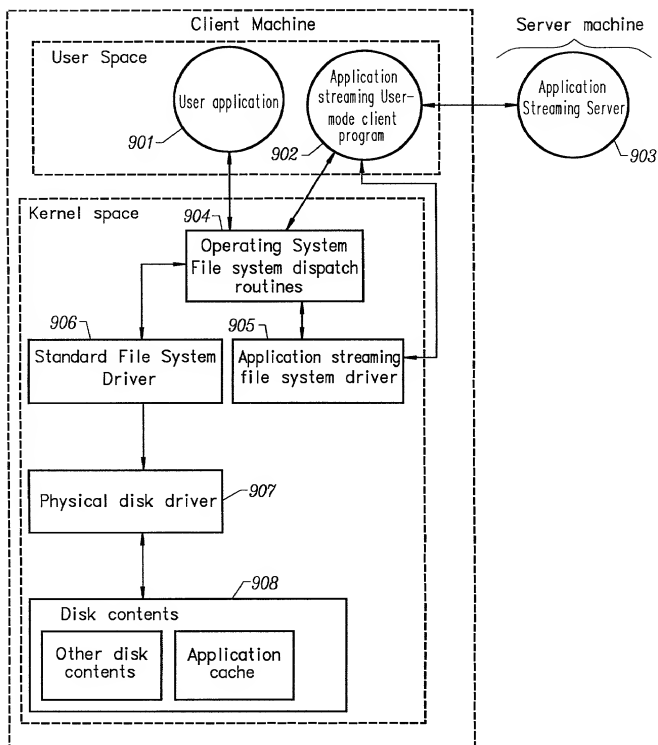


FIG. 9

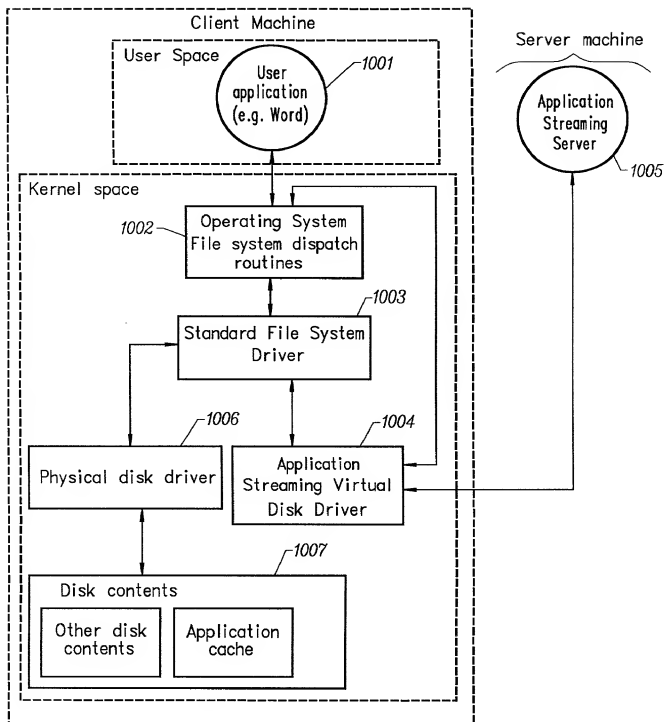


FIG. 10

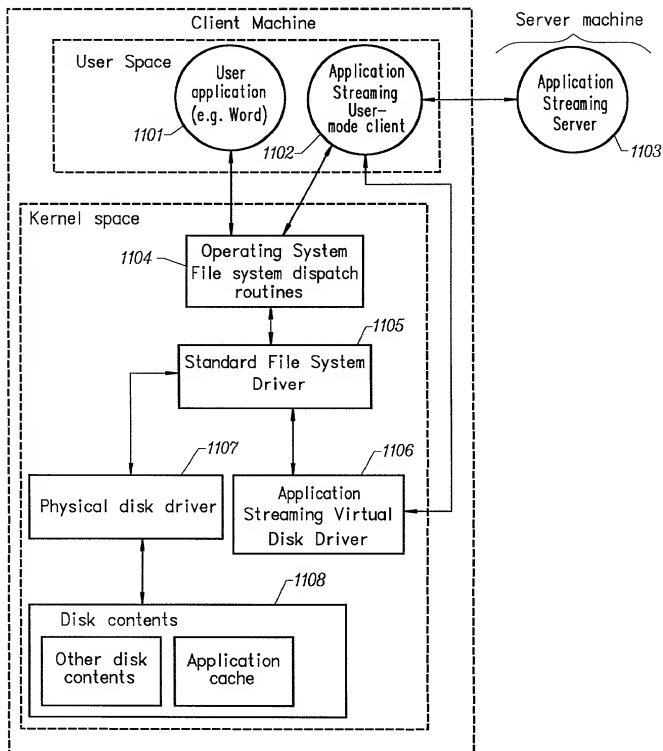
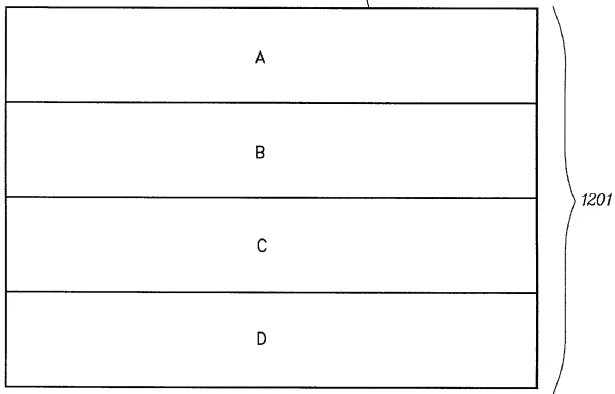


FIG. 11

Unencrypted Cache



Encrypted Cache

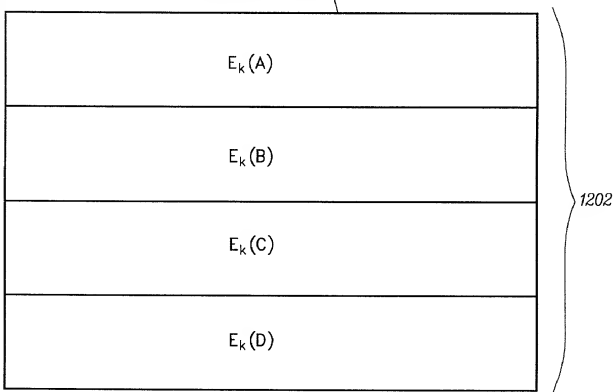


FIG. 12

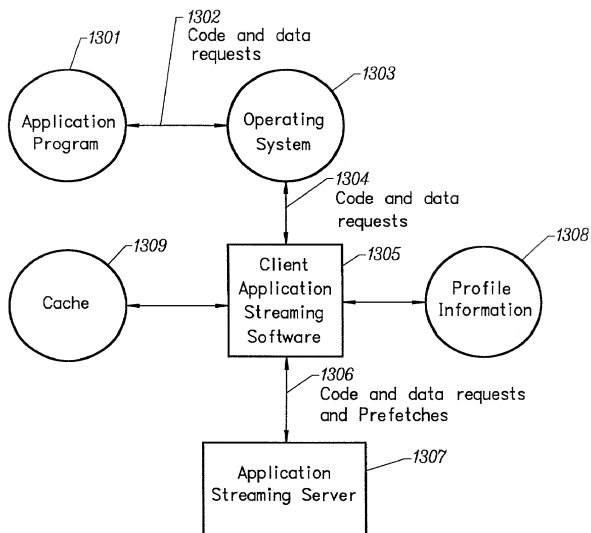


FIG. 13

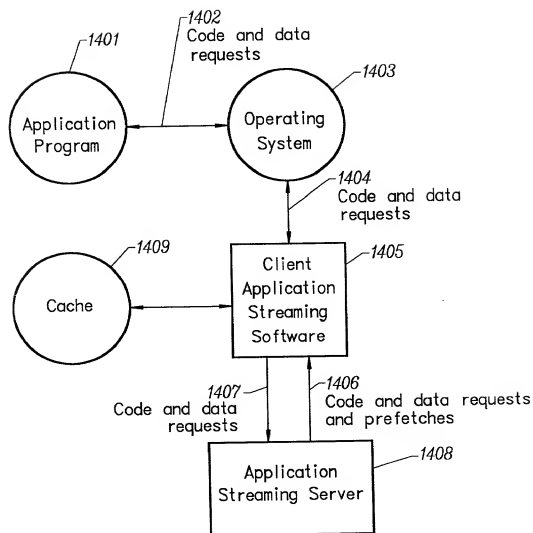
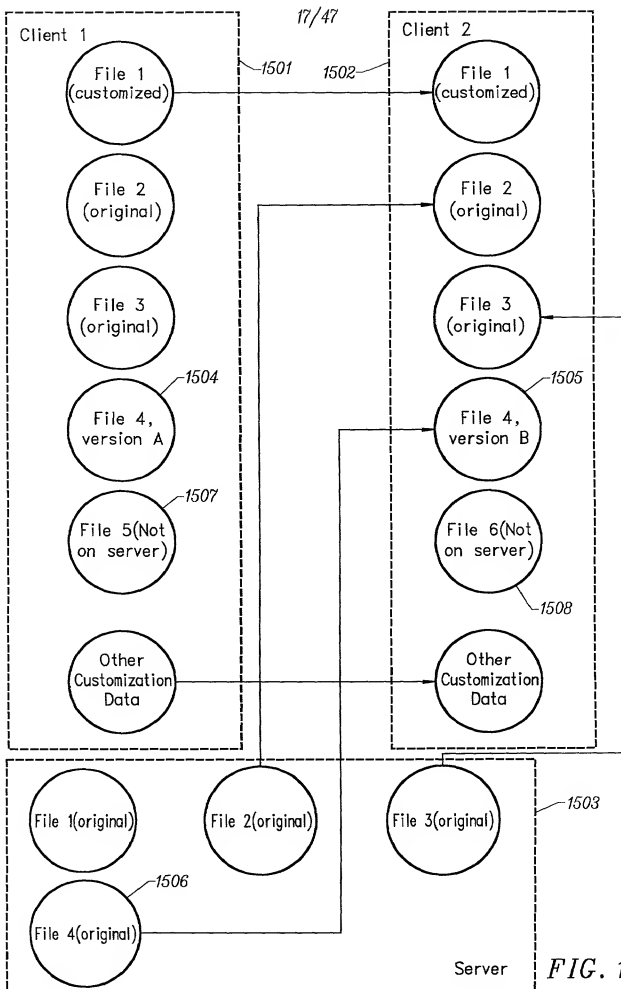


FIG. 14



Server

FIG. 15

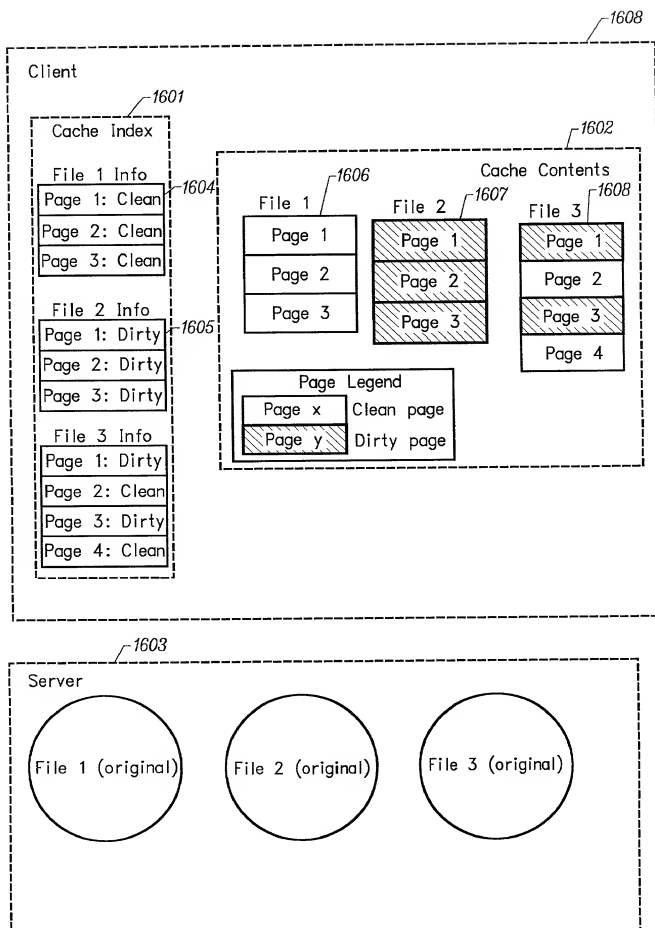


FIG. 16

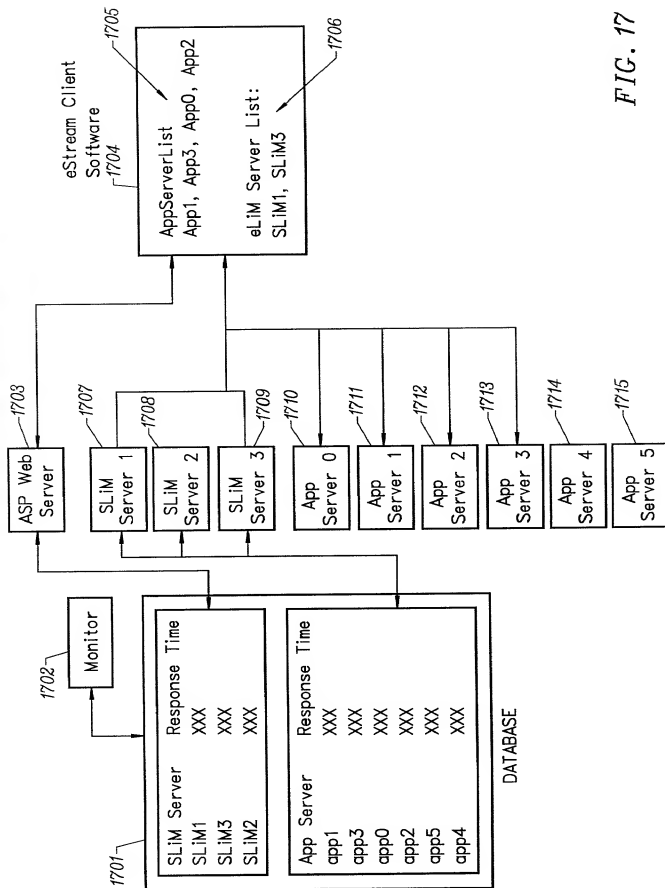
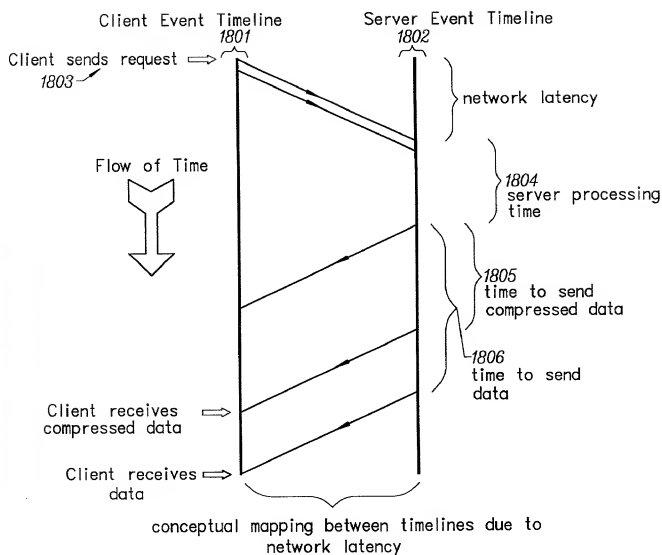


FIG. 17



Client receives data sooner if it is compressed

FIG. 18

Pre-Compression

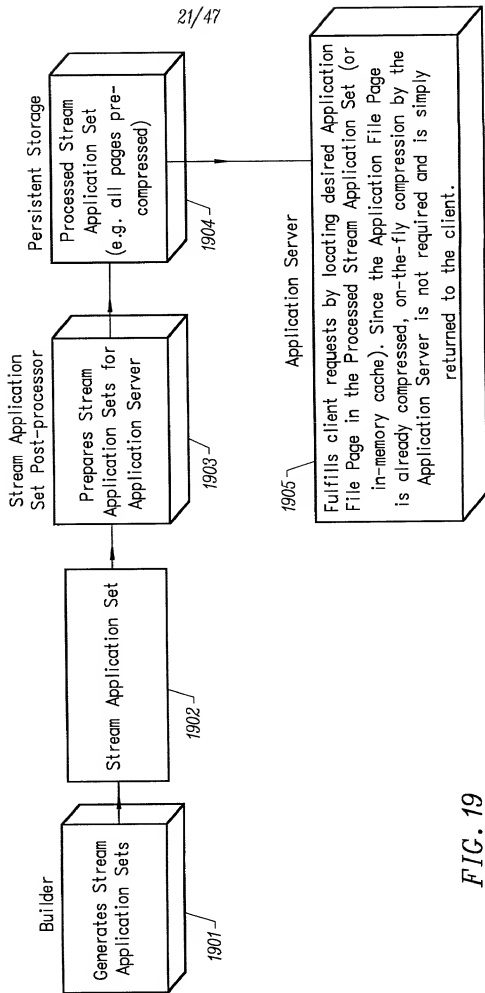
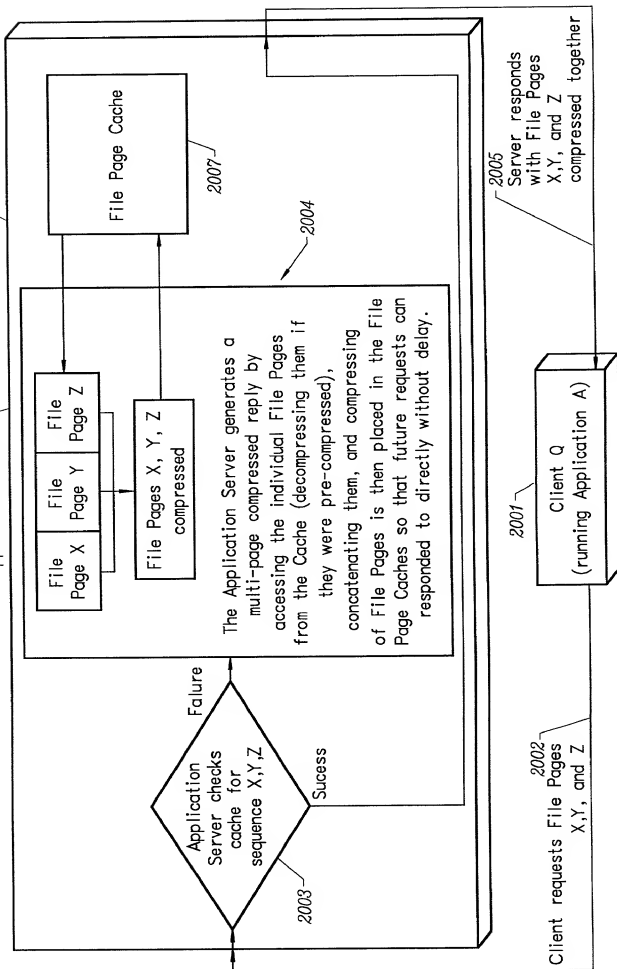


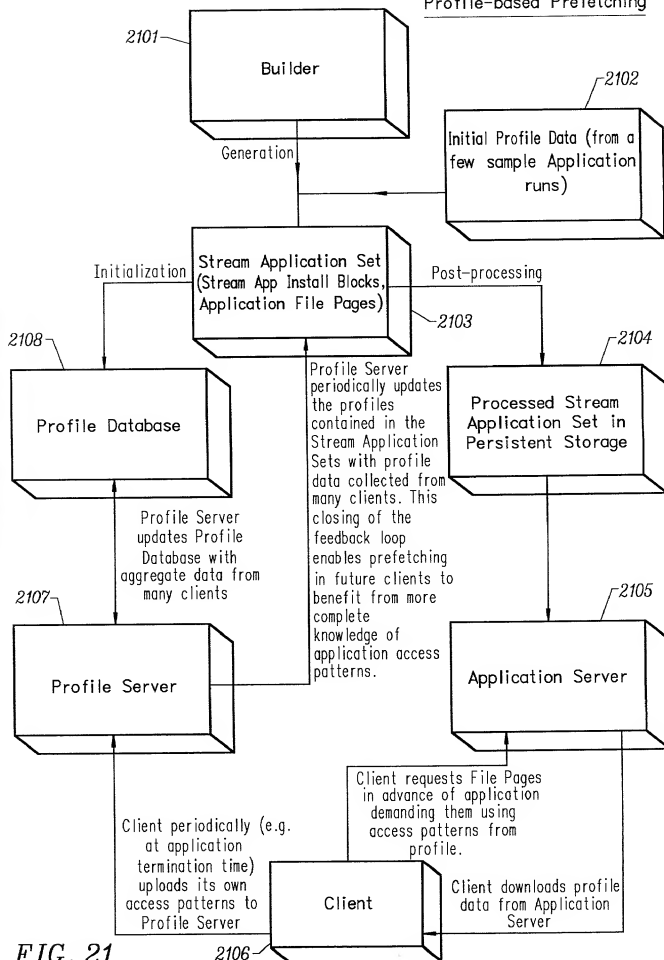
FIG. 19

FIG. 20

Multi-Page Compression

Application Server



Profile-based Prefetching

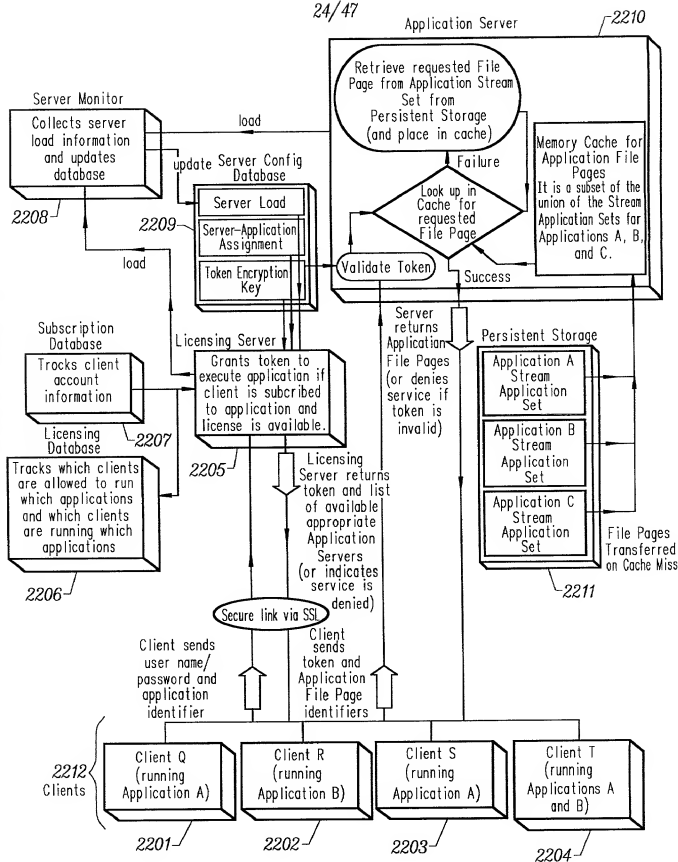


FIG. 22

Builder Install Monitor (IM) Control Flow Diagram

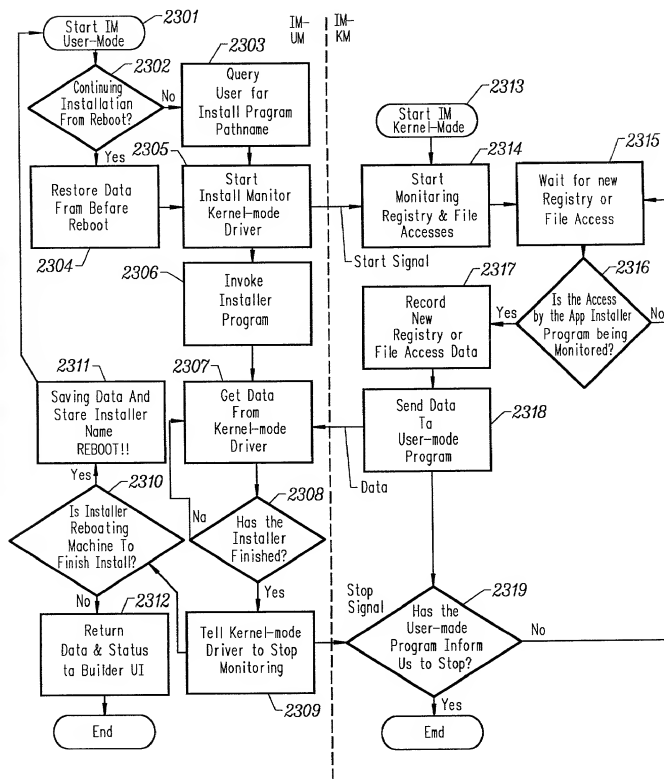


FIG. 23

Builder Application Profiler (AP) Control Flow Diagram

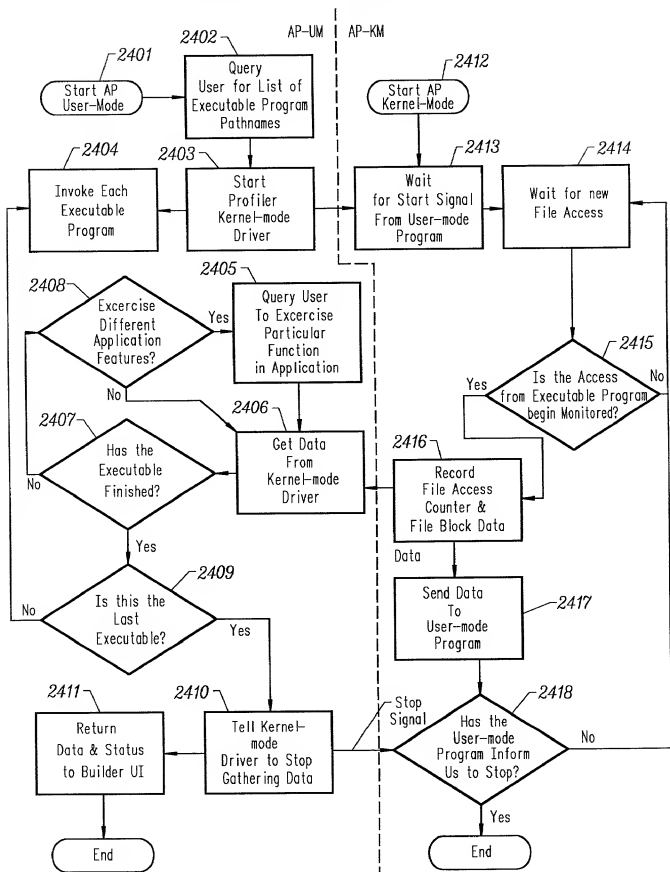


FIG. 24

Builder SAS Packager (SP) Control Flow Diagram

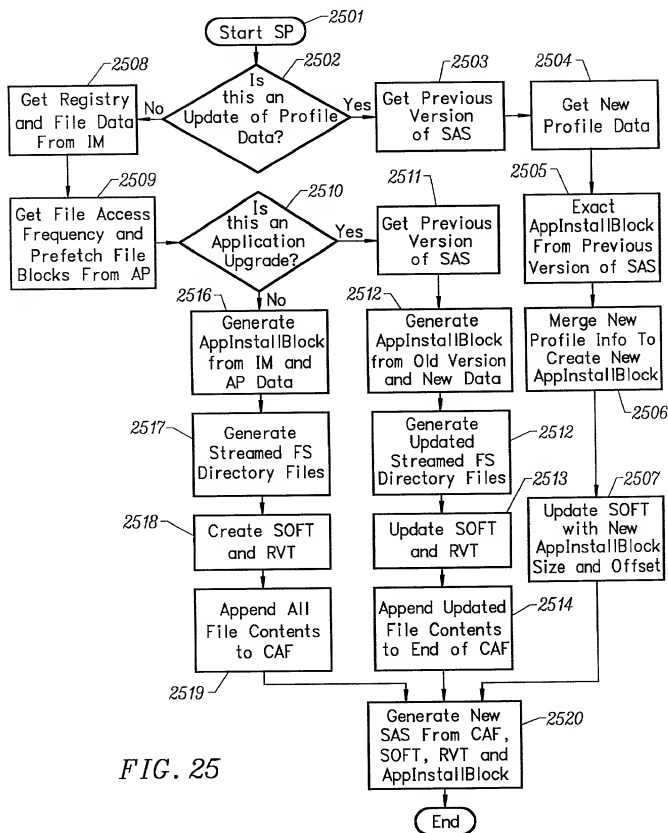


FIG. 25

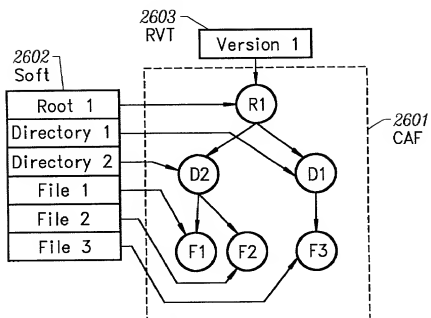


FIG. 26A

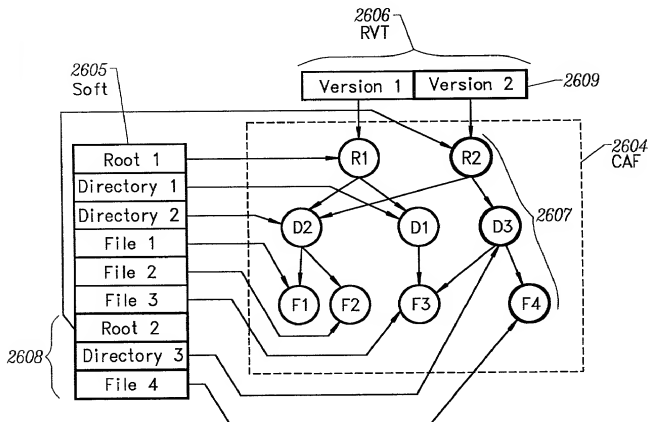


FIG. 26B

Streamed Application Set (SAS) Builder Data Flow Diagram

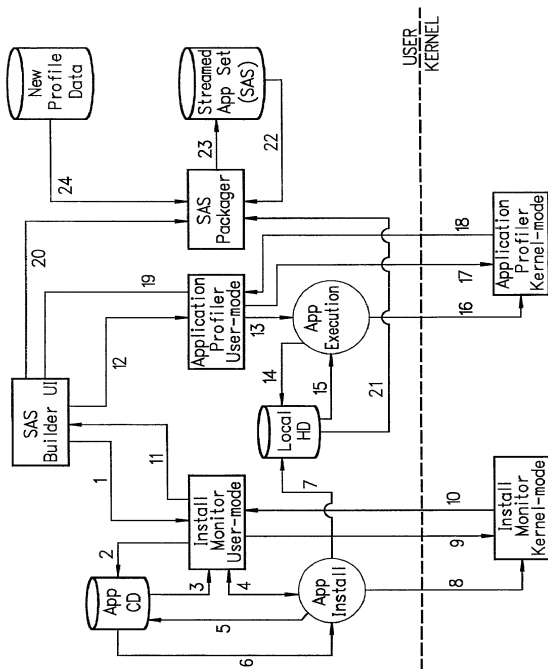
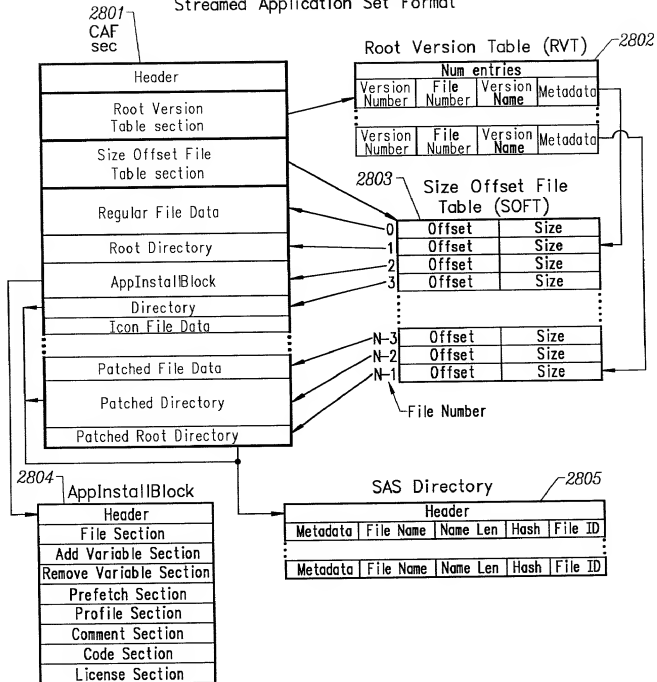


FIG. 27

Streamed Application Set Format



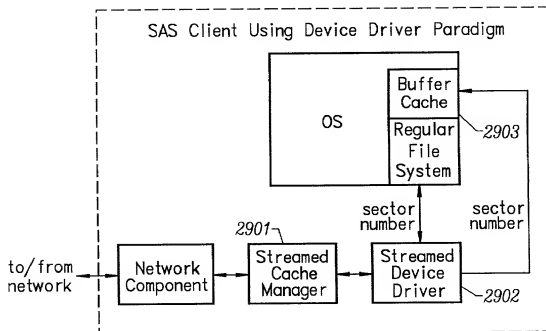


FIG. 29

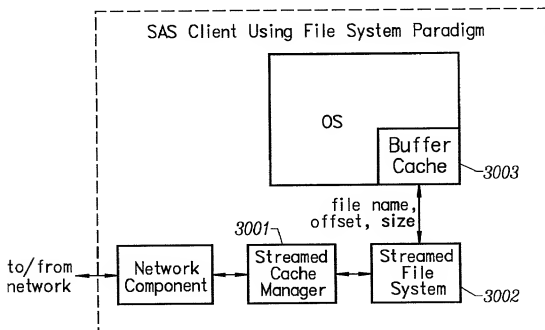


FIG. 30

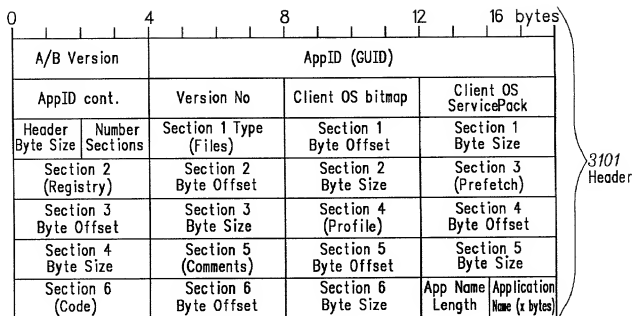


FIG. 31A

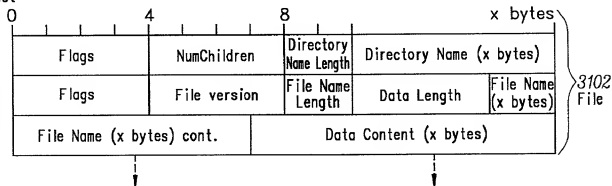
Section 1
Offset

FIG. 31B

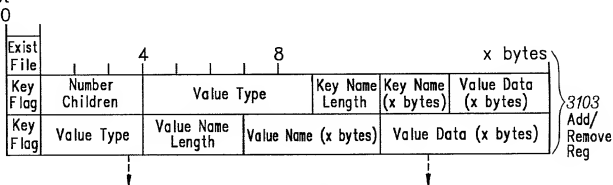
Section 2
Offset

FIG. 31C

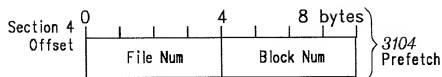


FIG. 31D

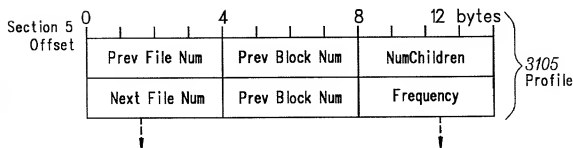


FIG. 31E

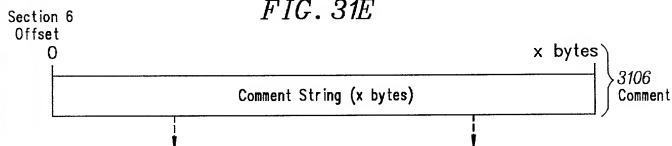


FIG. 31F

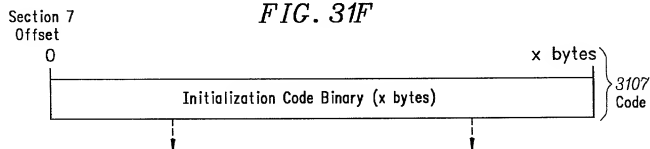


FIG. 31G

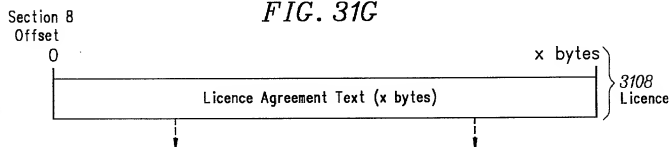


FIG. 31H

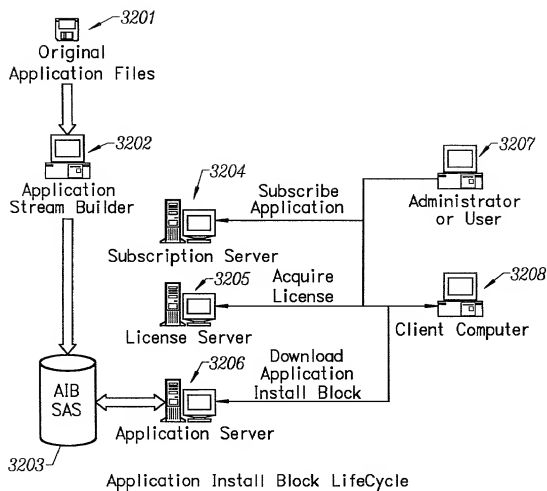


FIG. 32

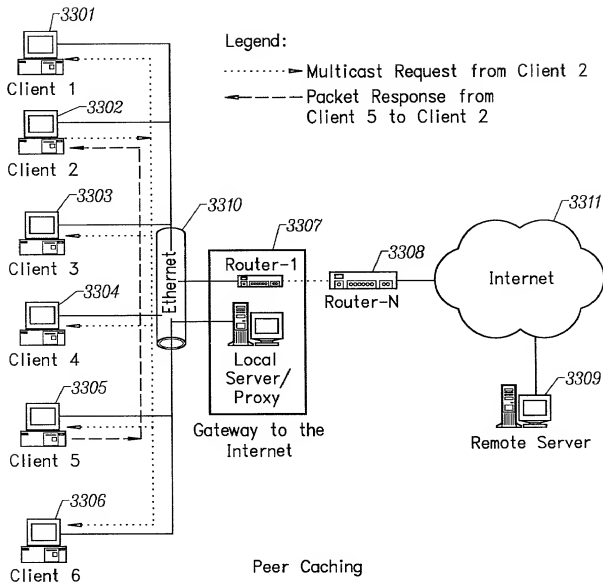


FIG. 33

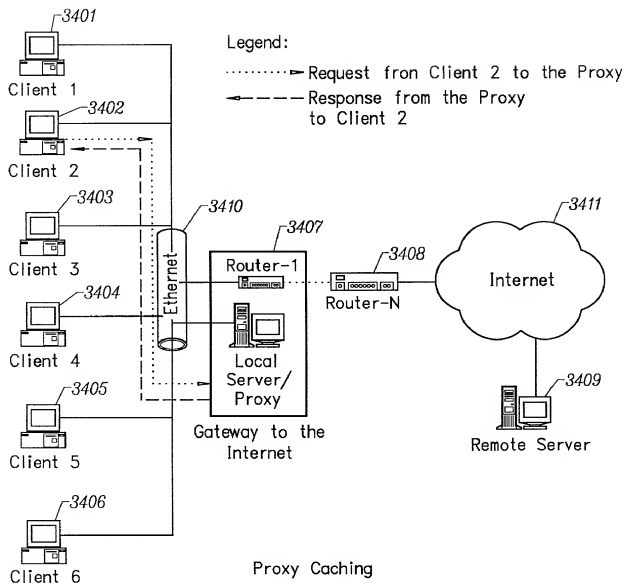


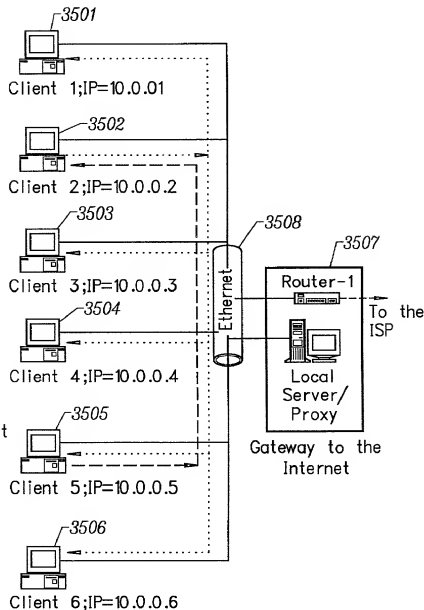
FIG. 34

Legend:

-→ Multicast Packet from Client 2
 ←--- Diagram packet from Client 5 to Client 2

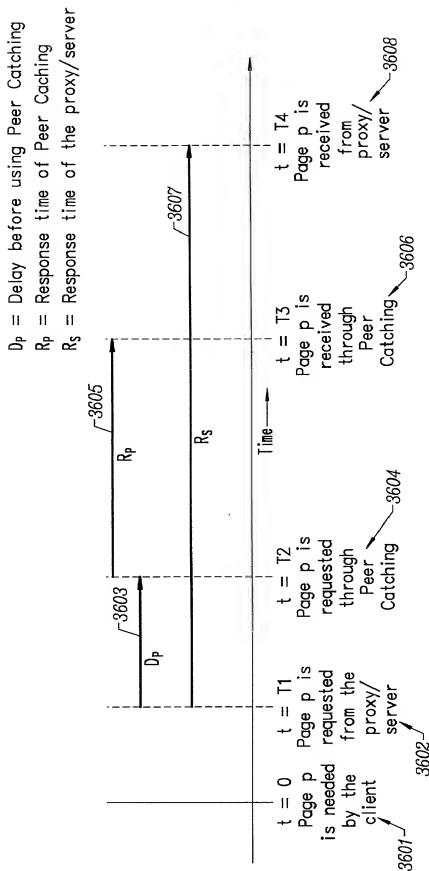
Client 2:
 Creates the request
 as a multicast packet;
 Sends the packet to
 the group 239.0.0.1
 port 2001 from port
 3002; Waits at port
 3002 for a response;

Client 5:
 Joins the multicast
 group 239.0.0.1 at port
 2001; When a packet
 is received, processes
 the request; Sends
 the response packet
 to 10.0.0.2:3002;



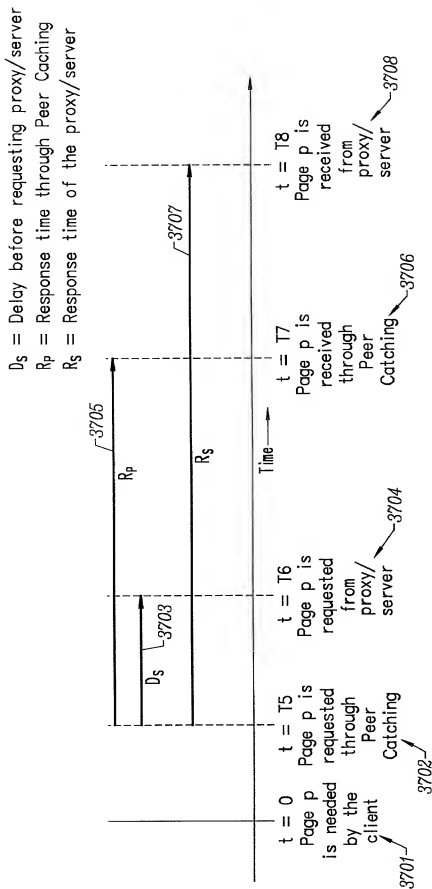
Milticast within a LAN
 and Packet Protocol

FIG. 35



Concurrent Requesting - Proxy First

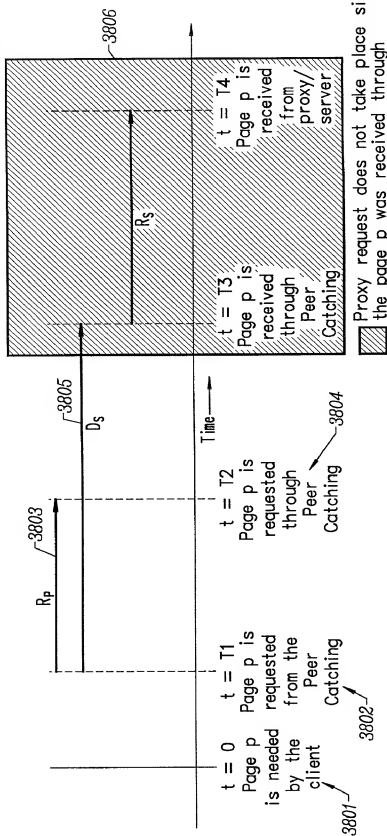
FIG. 36



Concurrent Requesting - Peer Catching First

FIG. 37

D_s = Delay before requestig proxy/server
 R_p = Response time through Peer Caching
 R_s = Response time of the proxy/server



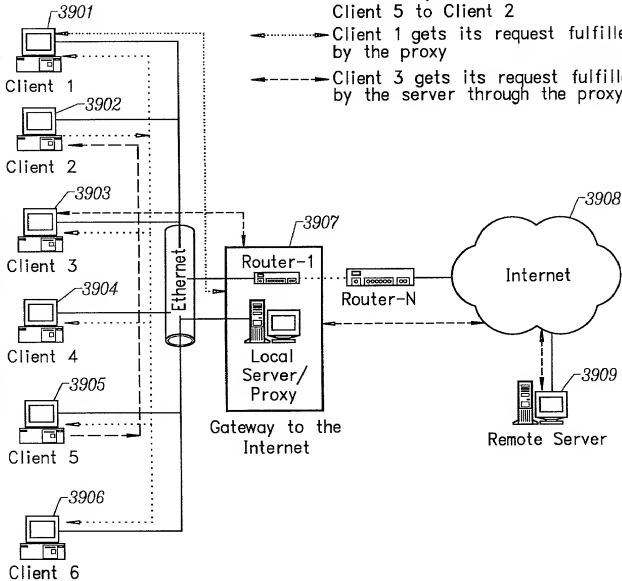
Proxy request does not take place since the page p was received through Peer Caching

Concurrent Requesting - Peer Caching Only

FIG. 38

Legend:

- Multicast Request from Client 2
- Packet Response from Client 5 to Client 2
- Client 1 gets its request fulfilled by the proxy
- Client 3 gets its request fulfilled by the server through the proxy



Client-Server System with Peer
and Proxy Caching

FIG. 39

Preventing Piracy of Remotely Served,
Locally Executed Applications

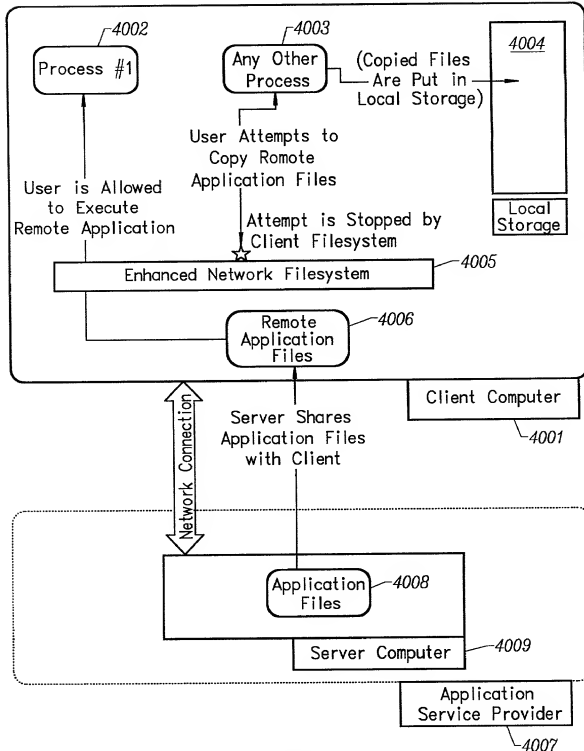


FIG. 40

Filtering of Accesses to Remote Application Files

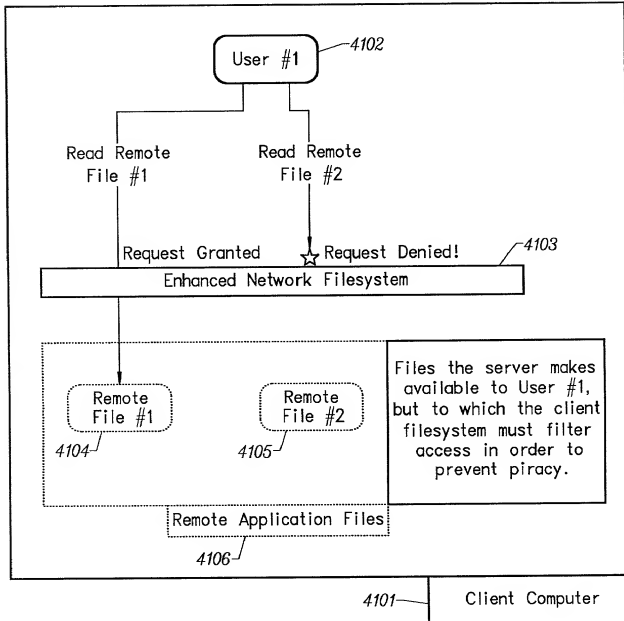


FIG. 41

Filtering of Accesses to Remote Files Based on Process Code Location

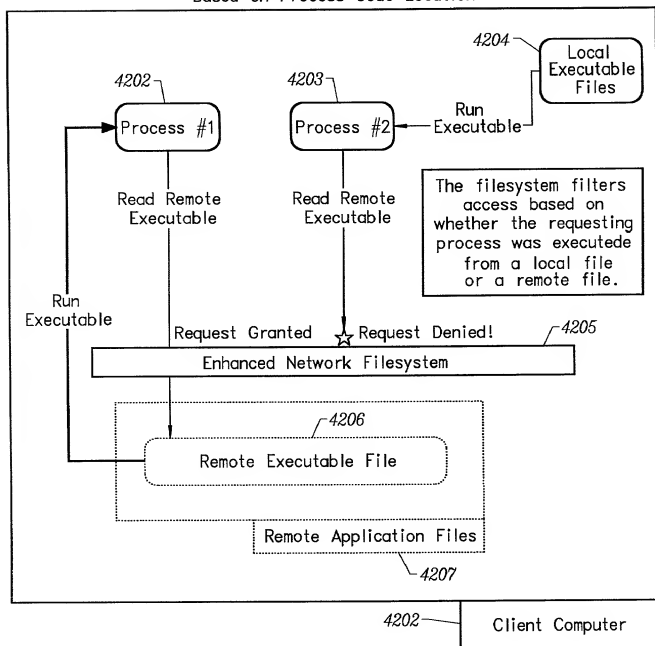


FIG. 42

Filtering of Accesses to Remote Files Based on Targeted File Section

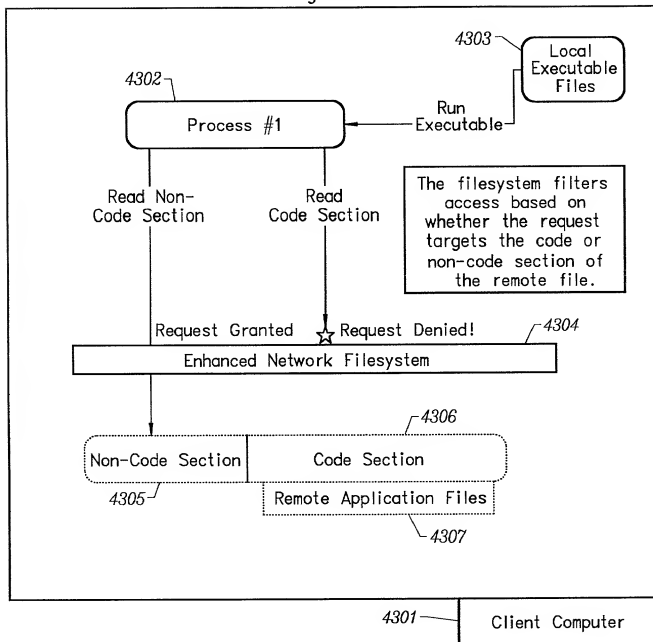


FIG. 43

Filtering of Accesses to Remote Files
Based on Surmised Purpose

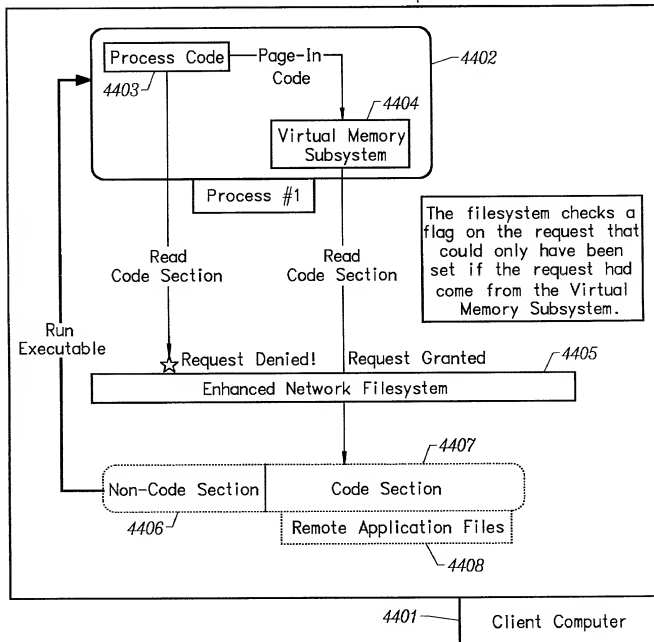


FIG. 44

Filtering of Accesses to Remote Files
Based on Past Access History

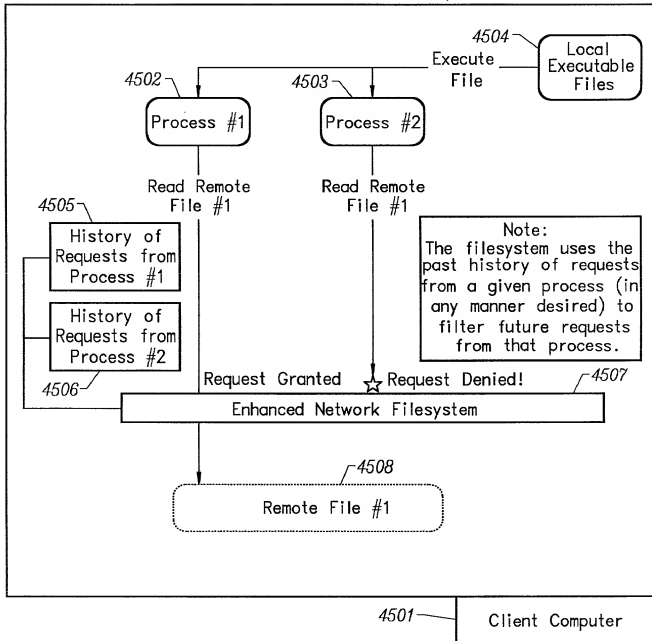


FIG. 45